

## AMENDMENTS TO THE CLAIMS

*This listing of claims will replace all prior versions and listings of claims in the application:*

### Listing of Claims:

What is Claimed is:

1. (Currently amended) Gas chromatograph for the analysis of a sample, having a feed arrangement [[(3-6)]] for feeding the sample, an open tubular capillary column [[(2)]] for separating the components of the sample, temperature control means [[(8-15)]] for controlling the temperature of the column [[(2)]], and a detector [[(1)]] for detecting the separated components of the sample, wherein said column [[(2)]] comprises a bundle of open tubular capillaries, characterized in that said open tubular capillaries [[(16)]] have gas permeable walls comprising a polymer membrane [[(19)]].
2. (Currently amended) Gas chromatograph according to claim 1, characterized in that [[it]] the gas chromatograph is a hand-held portable gas chromatograph.
3. (Currently amended) Gas chromatograph according to claim [[3]] 1 characterized in that said [[wall]] walls [[has]] have an inner layer of a selectively gas permeable polymer membrane [[(19)]] and an outer layer of a porous polymer support [[(18)]].
4. (Currently amended) Gas chromatograph according to claim 1 characterized in that said

bundle has between 10 and 10000 pieces of open tubular capillaries [[(16)]].

5. (Currently amended) Gas chromatograph according to claim 1, characterized in that said open tubular capillaries [[(16)]] have a length of 10 to 100 cm and an inner diameter of 10 to 1000 µm.

6. (Currently amended) Gas chromatograph according to claim 1, characterized in that said bundle contains 100 to 4000 pieces of said open tubular capillaries [[(16)]].

7. (Currently amended) Gas chromatograph according to claim 1, characterized in that the inner diameter of the tubular capillaries [[(16)]] is from 50 to 1000 µm.

8. (Currently amended) Gas chromatograph according to claim 1, characterized in that said open tubular capillaries [[(16)]] have open space between them.

9. (Currently amended) Gas chromatograph according to claim 1, characterized in that said column [[(2)]] has a cover [[(10, 14)]] surrounding said bundle.

10. (Currently amended) Gas chromatograph according to claim 8, characterized in that said temperature control means [[(8-15)]] include a heating medium [[(9)]] arranged to flow [[(11)]] through said open space between said capillaries [[(16)]].

11. (Currently amended) Gas chromatograph according to claim 10, characterized in that said temperature control means [[(8-15)]] include said cover [[(14)]] which is made of heat insulating material and has inlet and outlet openings [[(8)]] for allowing said heating medium [[(9)]] to

flow through said open space between said capillaries [[(16)]].

12. (Currently amended) Gas chromatograph according to claim [[1]] 10, characterized in that said temperature control means [[(8-15)]] include a thermostat heater [[(13)]] for controlling the temperature of said heating medium [[(9)]].

13. (Currently amended) Gas chromatograph according to claim 12, characterized in that said temperature control means [[(8-15)]] include a pump [[(12)]] and a hose or tube [[(15)]] for pumping and conveying said heating medium [[(9)]] between said thermostat heater [[(13)]] and the open space between said capillaries [[(16)]].

14. (Currently amended) Gas chromatograph according to claim 1, characterized in that said feed arrangement [[(3-6)]] comprises a filter [[(3)]] for absorbing vapour from the sample before it enters the column [[(2)]].

15. (Currently amended) Gas chromatograph according to claim 1, characterized in that said feed arrangement [[(3-6)]] comprises a gas inlet [[(5)]] for letting the sample into said column [[(2)]].

16. (Currently amended) Gas chromatograph according to claim 14, characterized in that said feed arrangement [[(3-6)]] comprises a valve [[(4)]] for directly directing the sample to said column (2) alternatively directly or alternatively through said filter [[(3)]].

17. (Currently amended) Gas chromatograph according to claim 1, characterized in that said feed arrangement [[(3-6)]] comprises a valve [[(6)]] for directing the sample through said column [[(2)]] or alternatively directly to said detector [[(1)]].

18. (Currently amended) Gas chromatograph according to claim 1, characterized in that said detector [[(1)]] is an ion mobility spectrometer (IMS).

19. (Currently amended) Gas chromatograph according to claim 18, characterized in that the ion mobility spectrometer [[IMS]] is a hyphenated multisensor ion mobility spectrometer [[IMS]] designed for direct flow-through of the sample.

20. (Currently amended) Gas chromatograph according to claim 19, characterized in that said detector [[(1)]] employs semiconductor sensors, electroacoustic gas sensors or sensor arrays thereof, or humidity and temperature sensors, or a combination of any of those, in which case at least one sensor is said ion mobility spectrometer [[IMS]].

21. (Cancelled)

22. (Previously presented) Gas chromatograph according to claim 1, characterized in that said gas chromatograph is a portable and/or hand-held gas analyzer.